

Name: _____

Date: _____

Period: _____

Probability and Statistics Test

35

A bag contains 2 green marbles, 5 purple marbles, and 3 yellow marbles. (6 points)

What is the probability of selecting a purple marble, replacing it, and then selecting another green marble?

What is the probability of selecting a yellow marble, not replacing it, and then selecting a green marble?

P(two green marbles) without replacing.

Are the two events dependent or independent? Explain. (4 points)

Pick a name from a hat. Without replacement, pick another name from the hat.

Tossing a nickel and rolling a die.

The community council wants to survey the students to find out what t-shirt they want for the field day. Answer the following questions in as much detail as you can.

Population (1 point)

Sample (1 point)

How should we pick the students? Conduct a simple random sample. Explain how it is a SRS. (2 points)

Draw a double stem-and-leaf plot for the data. (2 points)

Larry: 78, 95, 91, 100, 85, 80, 93

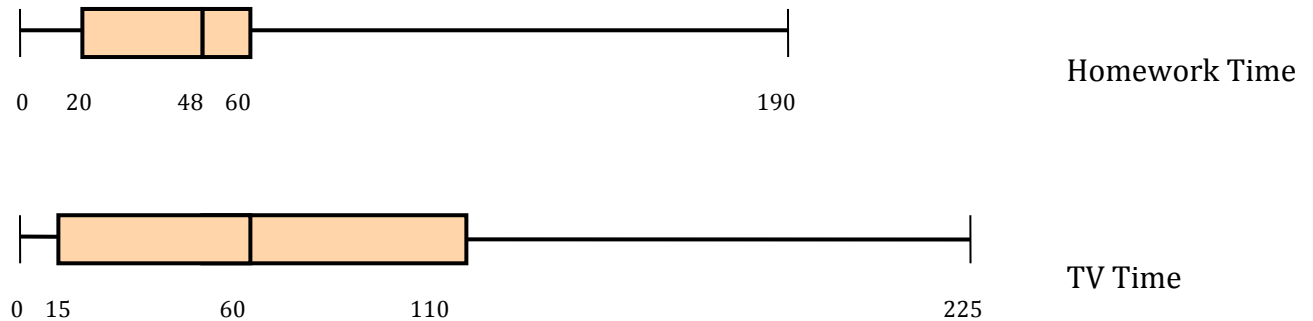
Moe: 85, 93, 99, 80, 65, 86, 94

If these were test scores, out of 100, who did better overall? How do you know? (1 point)

If Larry wants to have an average of 90, what does he need to get on their next test? (2 points)

Which measure of central tendency best describes Moe's data? Explain. (1 point)

Complete the chart below for the box-and-whisker plot. (2 points)



	Homework Time	TV Time
Minimum		
Lower Quartile		
Median		
Upper Quartile		
Maximum		

Answer the following questions based on the box-and-whisker plot above. (3 points)

What percent of students watch TV for at least 15 minutes per night?

Is it more common for a 7th grader to spend more than 1 hour on homework, or watch more than 1 hour of TV? Explain.

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